

AD-A237 325 DTIC



NOV 8 1991

2

STUDY PROJECT

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

THE INDIVIDUAL READY RESERVE (IRR): PRESENT AND FUTURE STRATEGY

BY

LIEUTENANT COLONEL H. ALLEN CHADWICK
United States Army

DISTRIBUTION STATEMENT A: Approved for public release.
Distribution is unlimited.

USAWC CLASS OF 1991



U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

91-03121



REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE			4. PERFORMING ORGANIZATION REPORT NUMBER(S)		
4. PERFORMING ORGANIZATION REPORT NUMBER(S)			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION U.S. Army War College		6b. OFFICE SYMBOL (If applicable)		7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code) Carlisle Barracks, PA 17013-5050		7b. ADDRESS (City, State, and ZIP Code)			
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF FUNDING NUMBERS			
		PROGRAM ELEMENT NO.		PROJECT NO.	TASK NO.
					WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) Profile of the IRR.					
12. PERSONAL AUTHOR(S) LTC H. Allen Chadwick					
13a. TYPE OF REPORT Final MSP		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Year, Month, Day) 91-04-05	
				15. PAGE COUNT 36	
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP			
19. ABSTRACT (Continue on reverse if necessary and identify by block number) In the 21st century the U.S. Army will face some major national security challenges. The Army must carefully determine the size and composition of its active and reserve forces. The Army will be limited in its military objectives by its force capabilities. In the next century the reserve component will be entrusted with more strategic responsibilities and a greater share for our nation's security. With these extraordinary responsibilities, the reserves must be able to achieve their specific wartime objectives. Future fiscal and manpower constraints will require the Army to re-evaluate resources to maintain a potent and viable force. This force must ensure the highest state of readiness for the individual, the unit and the total force. This force must be deployable anywhere; and it must be trained to fight effectively. The ability of the military to meet its force requirements for mobilization will become a progressively difficult problem in the 21st century. As both the active forces' end strength and reserve units' end strength decline, another manpower pool will grow--the Individual Ready Reserve (IRR). Future levels of conflict will require the total force to quickly (continued on back)					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a. NAME OF RESPONSIBLE INDIVIDUAL COL JOSEPH P. SPIELBAUER, Project Adviser			22b. TELEPHONE (Include Area Code) (717) 245-3320/3725		22c. OFFICE SYMBOL AWCAA

19. Abstract (continued)

field a highly trained, technologically advanced and lethal force. This force will be greatly dependent on a highly trained and technologically proficient IRR force. The IRR soldier will emerge more and more as a partner in the nation's military and security interests. The IRR will then represent this country's largest pool of deployable pre-trained individual manpower. The significance of having this highly trained, rapidly deployable, large manpower pool will manifest itself in future defensive strategic planning.

Accession For	
ATTC GRAFI	<input checked="" type="checkbox"/>
OTTC IAB	<input type="checkbox"/>
Unprocessed	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

USAWC MILITARY STUDIES PROGRAM PAPER

The Individual Ready Reserve (IRR):
Present and Future Strategy

AN INDIVIDUAL STUDY PROJECT

by

Lieutenant Colonel H. Allen Chadwick
United States Army

Colonel Joseph P. Spielbauer
Project Adviser

U.S. Army War College
Carlisle Barracks, Pennsylvania 17013

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.



ABSTRACT

AUTHOR: H. Allen Chadwick, LT COL USA

TITLE: Profile of the IRR

FORMAT: Individual Study Project

DATE: 5 April 1991 PAGES: 35 CLASSIFICATION: Unclassified

In the 21st century the U.S. Army will face some major national security challenges. The Army must carefully determine the size and composition of its active and reserve forces. The Army will be limited in its military objectives by its force capabilities. In the next century the reserve component will be entrusted with more strategic responsibilities and a greater share for our nation's security. With these extraordinary responsibilities, the reserves must be able to achieve their specific wartime objectives. Future fiscal and manpower constraints will require the Army to re-evaluate resources to maintain a potent and viable force. This force must ensure the highest state of readiness for the individual, the unit and the total force. This force must be deployable anywhere; and it must be trained to fight effectively. The ability of the military to meet its force requirements for mobilization will become a progressively difficult problem in the 21st century. As both the active forces' end strength and reserve units' end strength decline, another manpower pool will grow--the Individual Ready Reserve (IRR).

Future levels of conflict will require the total force to quickly field a highly trained, technologically advanced and lethal force. This force will be greatly dependent on a highly trained and technologically proficient IRR force. The IRR soldier will emerge more and more as a partner in the nation's military and security interests. The IRR will then represent this country's largest pool of deployable pre-trained individual manpower. The significance of having this highly trained, rapidly deployable, large manpower pool will manifest itself in future defensive strategic planning.

Profile of the IRR:
Challenges, Risks and Opportunities

In the years ahead, the United States will face unprecedented challenges, risks, and opportunities in a volatile and unpredictable world. This rapidly changing international environment will place different and far-reaching demands on the U.S. Military, particularly on the conventional forces.*1 To meet the demands of the Twenty-first Century, the Total Army must be able to swiftly mobilize, deploy and employ combat-ready units as well as individuals. A key part of this strategy will be the Individual Ready Reserve force (IRR).

Composition of Reserve Components

The total reserve manpower pool consists of the Ready Reserve, Standby Reserve, and the Retired Reserve. The Ready Reserve consists of Selected Reserves, Individual Ready Reserves and the Inactive National Guard. The Selected Reserve encompasses those units that have essential wartime missions and are therefore organized, trained, and equipped at the highest level. The Individual Ready Reserve (IRR) is composed of individuals with previous service experience, who are trained but are not in units. They are available for recall to active duty on an individual basis. The Inactive National Guard (ING) consists of individuals who are attached to units, but do not actively participate in any training. In addition, some of these individuals serve voluntarily in the IRR.*2

The Standby Reserve contains those individuals who wish to remain affiliated with the Reserves but are unable to participate in the Ready Reserves. Finally, the Retired Reserve consists of both Active and Reserve Component individuals who have been transferred to a retired status.

Composition of the Ready Reserve

The U.S. Army Ready Reserve force strength as of 31 December 1990 was 1,076,699. The Individual Ready Reserve population was 308,275 (nearly 30 percent). One relatively new manpower classification specifies IRR Recently Trained (RT) soldiers. These individuals have transferred to the IRR pool for various reasons within the last 12 months. They are referred to as RT12s. In theory, such individuals are considered current and therefore proficient in their various military specialties. Significantly, RT12s will require less training and provide a "quick fix" to deployment shortfalls. As of 31 December 1990, RT12s numbered 39,500, or 12 percent of the IRR. The Selected Reserve--made up of Troop Program Unit (TPU) personnel who serve in units and the Individual Mobilization Augmentees (IMA) personnel who serve in individual mobilization positions--stands at 293,859 (27 percent). The Ready Reserve population thus totals 602,134 soldiers. The Standby Reserve contains 1128 individuals. Finally, the Retired Reserves number 473,737 (44 percent).

The Individual Ready Reserve

"The IRR represents the nation's largest pool of deployable pre-trained individual manpower (PIM) available to fill directed shortages in both Active Component (AC) and Army Reserve Components (RC) units and Department of Defense agencies in the event of a national emergency."*3 The IRR is a numerically significant resource: "As of 31 December 1990, there were approximately 308,275 soldiers in the IRR. Of these, about 55,393 (18%) are officers and 252,882 are enlisted."*4 In the Twenty-first Century this pool of manpower is projected to increase to 600,000. Manpower and fiscal constraints imposed upon the Army in the mid-1970's by Congress have led to the development and implementation of the Total Army Force policy. This policy has successfully integrated AC and RC military manpower capabilities despite fiscal constraints.

Since the implementation of the Total Army Force policy, the role of the RC has changed dramatically. The current policy requires that all reserve soldiers and units be as combat-ready as their active-duty counterparts. Furthermore, the national military strategy assigns an increased reliance on the RC to perform a multitude of first-line missions. Significantly, "In the first 30 days of full mobilization, the Army will rely on about 115,000 IRR soldiers to bring forward-deployed, deploying and stateside support units up to wartime strength."*5 Thus, the IRR soldier has become a linchpin in the mobilization process. The Desert Storm operation included 14,000 IRR soldiers who were activated and deployed to

Southwest Asia. They were immediately deployable because "the dynamics of the IRR strength manifested themselves in several ways. Largely it is a function of the strength of the Active force. As noted earlier the vast majority of the IRR consists of members who have been recently released from Active duty . . . and a number of IRR members who voluntarily remain in the IRR beyond their military service obligation."*6

The proficiency of IRR soldiers to fill wartime shortages and their ability to perform successfully in active and reserve units upon mobilization will be increasingly critical for a successful and rapid mobilization. Nonetheless, the Department of Defense has not effectively integrated its national military strategy to include early use of IRR capabilities in the mobilization process.

The composition of the IRR should compensate for shortfalls in the U.S. Army base force capabilities as prescribed by General Colin Powell, to meet present and future commitments and to support global and regional contingencies. Thus, the IRR must be viewed as a strategic personnel asset with a strategic go-to-war capability. Our strategic planners should note the changing demographics of the IRR in order to anticipate the best uses of this resource. Consider the current composition of the IRR force:

Enlisted IRR Composition

Table 1 represents the total enlisted composition by grade. Note that 83 percent of the force is E4 and below, and 189,000 individuals could be counted as mobilization assets. Table 1.1

displays IRR enlisted composition by function. Table 1.2 displays the IRR enlisted distribution by career management fields.

Officer Composition

Table 2 displays the composition of the Individual Ready Reserve (IRR) Officers. Table 2.1 exhibits typical IRR Officer characteristics. Note that over 53 percent of the total officers are in company grades.

IRR Turbulence Issue

But the IRR is a turbulent manpower pool. Thus our strategic planning should carefully project IRR's personnel characteristics in order to anticipate the best uses of IRR personnel in future situations. "The Army readiness [personnel] caused by the Army reserve's operational shortcomings is easily detected in quantified realms . . . problems in personnel MOS readiness"*7 are attributed to the following: "The high turnover rate . . . produces vacancies in specialties [unique to the IRR] for which it takes many months, even years, to acquire and train replacements."*8

It should be noted that training personnel for these shortages in some cases requires placing individuals on active duty for more than one year at full pay and allowances. In 1989, this cost amounted to over "three-quarters of billion dollars,"*9 compared to the Active component cost of one-quarter of billion dollars.

The dynamics of attrition in the IRR detracts from the total force readiness. There are no clear answers to correcting the

turbulence in the IRR. Future fiscal and manpower constraints coupled with increasing defense requirements and the desirability of retaining a highly proficient and effective IRR soldier will require a real solution. Military strategists must continually re-examine and reassess the strategic deployment role of the IRR.

Personnel Gain and Loss Turbulence in the IRR (FY 89)

Turbulence in the IRR is manifested on the SIDPERS gain and loss transactions for officer and enlisted soldiers.

Officer IRR

The total gains are nearly identical to the total losses. These are graphically depicted by total officer end strength in Table 3. The primary loss contributors are transfers to National Guard and USAR units. The primary gain contributors are transfers from the Active Component, direct appointments and standby reserves. The most interesting trend is in the TPU, ARNG, and IMA categories. In FY 89 these categories gained nearly as many officers as they lost. In other words, for every officer lost from a TPU, another will leave the IRR to fill that TPU position. This seems to be true for the ARNG and the IMA also.

Enlisted IRR

The total gains and losses have risen over the years, but so has the total enlisted end strength. These trends are graphically depicted in Table 4. The primary reason for losses is due to End of Time in Service (ETS). This factor accounts for over sixty-seven percent (67%) of the total enlisted losses. These losses are

mostly first term ETS losses. Personnel have completed their Military Service Obligation (MSO) and do not re-enlist for continued IRR service. The MSO was extended by law from six years to eight years in June 1984. The effect of this MSO change will delay first-term ETS losses from June 1990 until May 1992. This will swell the IRR by about 170,000 first-term soldiers. After this temporary freeze, first term ETS losses should continue at the same rate as before. These personnel gains come from the Active Component, USAR TPUs, and ARNG TPUs. The Active Component is, by far, the largest contributor, producing forty-six percent (46%) of all IRR gains. The "revolving door" trend found in the IRR officer data is likewise evident in the enlisted total losses versus total gains. But specific contributors to this situation are harder to determine. Essentially, the gains from the Active Component, USAR TPUs, and the ARNG offset the losses from ETS. This situation suggests that most of the IRR soldiers who reach ETS have spent from two to four years in the IRR completing their MSO. If this is so, then there is not as much turbulence as might be implied by the total losses versus total gains ratios.

Differences between officer and enlisted trends reflect the differences in the two management systems. Officers remain in the IRR until they choose to do something to change their status. Enlisted soldiers have to choose re-enlistment to remain in the IRR. The change in the length of MSO has had more impact on the enlisted IRR than the officer IRR. As noted, enlisted soldiers must actively seek re-enlistment to be retained in the IRR.

LTG Reno, Chief of Staff for Personnel (DCSPER), described upcoming AC turbulence in remarks to the U.S. Army War College Class 1991: "As mandated by Congress, the challenge facing the Active component is to reduce from 737K, the actual end strength FY 90, to 520K by the end of FY 95 . . . This is a reduction of almost 220K over the next five years; and except for approximately 30K in FY 91, the necessary reduction per year is over 40K."*10 In addition, the 1992-1997 Program Objective Memorandum calls for USAR (Troop Program Unit) and National Guard unit end-strength reductions of 26K per year (130K total). Ironically, this decision by the Army planners targets Reserve Component Unit Readiness. Thus individuals who chose to stay active in the reserve components and who might have joined a unit will not have that opportunity. Instead, they will be added to the IRR manpower pool. So IRR strength will increase in direct proportion to our drawdown of Active Component and other Reserve Component forces.

Screening the IRR

The activation of millions of reservists during any mobilization scenario has presented defense strategists for years with a "manpower dilemma: How to attain a maximum military force yet maintain effective functioning of government and private sectors."*11

In order to mitigate the effects of this dilemma and to avert the historical mistakes of not being able to locate and determine the availability and the demographics of this large manpower pool,

Congress directed the military to set up a continuous reserve screening system. The Assistant Secretary of Defense for Reserve Affairs has the overall responsibility for the Ready Reserve program. The commander of the Army Reserve Personnel Center (ARPERCEN) has the specific responsibility for screening the IRR.

The IRR screening program, in its third year, "continues to be a success. By end of fiscal 1989, more than 550,000 soldiers had received screening orders, with approximately 53 percent participating by reporting for one day of active duty to update their records."*12 A benefit from the screening program has been the consolidation of the Army Screening program at ARPERCEN. This centralization has allowed for upgrading pertinent real-time data, such as current addresses, current skill levels, current physical condition. Most of all, it has reduced the risk associated with IRR mobilization. This benefit is evident today: 90% of IRRs have reported as called to their "Desert Storm" mobilization assignments.*13 A second benefit of the screening program has been the Enlisted Skill refresher training program, conducted by the Training and Doctrine Command (TRADOC) for enlisted soldiers "to determine skill degradation and refresher training needs of IRR soldiers."*14 The third benefit has been the tracking of the IRR by geographical area, which has enabled the Army to plot shifts in the IRR population. (See Table 5--Non-unit Army Reserve Strength-- and Table 5a--Non-unit Army Reserve Retired Reserve Strength.) The screening program has met the needs of the Army to ensure that the IRR reservists are properly screened prior to mobilization.

Unfortunately, in the past two years the major benefactor, the US Army, has failed to fund the program. Thus the Chief, US Army Reserve, has redistributed monies to pay for the program. In the future, the Force Projection Strategy will rely on the screening program for immediate support in any crisis.

Mobilization Training Requirements

A mobilization training system designed in the early 1980's by ARPERCEN identified projected mobilization requirements against available assets for Active Component (AC) and Reserve Component (RC) units deploying in the first ninety days. A new and greatly enhanced mobilization training document "First-Train" focuses on the personnel requirements of those units that deploy within the first 30 days. The requirements identified in First-Train are mobilization requirement vacancies in the Active Component (Compo 1) and the Reserve Component (Compo 2 and 3) units that have been identified for complete or total fill by the IRR soldiers within the first thirty days of a declaration of a national emergency. This document is a by-product of MOBPERS, which develops mobilization requirements for the Active Army by comparing or combining requirements from DA, DSCPER; from the U.S. Army National Guard Standard Installation/Division Personnel System (SIDPERS); from U.S. Army Reserve (USAR) SIDPERS data tape; from Vertical, the Army Authorization Document System; and from Army Mobilization and Operations Planning System (AMOPS). The second purpose of "First-Train" is to provide AC mobilization planners and RC trainers

guidance on the distribution of mobilization training funds to train soldiers with specialties required in the earliest phase of mobilization. Thus, First Train offers strategic planners an effective system for drawing quickly upon IRR resources and for mobilizing the proper mix of requisite personnel.

Funding the Program for Training

An analysis of the IRR's ability to execute its present and future role(s) in the national defense strategy begins with adequate resourcing in defense dollars. Given the continued growth during the Reagan years in personnel and force structure for the reserves and a capped end strength force for the active forces, the IRR share of these resources has been disproportionately low. The significance of having highly trained personnel in a deployable manpower pool requiring a minimum of post-mobilization training should be of key importance to the Army planners. It indicates the vital role the IRR plays in the Total Force. Despite these factors, the Army has not made IRR training a high priority.

The IRR mobilization training program focuses on "FIRST-TRAIN" early mobilization needs, balanced with the Army's goals of having a highly trained and a competently led force. However, the low priority afforded the Reserve Personnel Authority (RPA) budget by the Active Army is best described in a GAO Report on the IRR, Army Needs to Make More Effective Use of Limited Training Funds:

The level of funding provided to IRR training is one indicator of its low priority. In fiscal year 1988, \$54 million was provided for IRR training, whereas \$1.2 billion was provided for the training of Selected Reserve

members. Despite the fairly constant level of the IRR population from 1985 to 1989, funding for IRR training has dropped considerably from the fiscal year 1985 level of about \$87 million. Another indicator of the training's low funding priority is the reprogramming of funds from the IRR mobilization training account. In fiscal year 1988, for example, although almost \$72 million was budgeted for IRR mobilization training, about \$18 million (25 percent) of that amount was reprogrammed. . . . Army officials said that the reprogramming of funds makes it difficult for ARPERCEN to plan training for IRR soldiers. . . . Uncertain funding levels make it [even] more difficult to ensure the training of IRR members.*15

Resourcing decisions, consciously or not, do not favor the IRR. Viewed by many as receiving adequate sustained support, the IRR is an essential part of our national military strategy and should be resourced accordingly. The American public's and the U.S. Congress' interest in a strong affordable national defense translates into maintaining a moderate sized Active force and sustaining a strong properly resourced Reserve force, in which the IRR must be major partner.

The priority and level of funding should be based on national defense strategy mission requirements (Base Force). Increased funding would strengthen individual qualifications, make available exercise and contingency opportunities and provide for professional development and education.

Effects on Future Strategy

In the Twenty-first Century this nation's security environment will have been reshaped by global changes. These changes will require military planners at all levels to match the Total Force structure and capabilities with imposed fiscal limitations.

Changes to the Master Mobilization Plan will allow easier accessibility to reserve units and individuals. Proposed changes to the command and control structure of the Total Army will allow the Commander in Chief to effectively and efficiently draw upon all of the first assigned, to include the IRR.

Our national military strategy will have to remain inherently flexible to constant change. This change will enhance the need, role and use of the Reserve forces, especially the IRR. The growing strategic reliance on the IRR will be economically prudent during periods of fiscal constraint and will allow this nation's strategists to "place a substantial portion of our total military power in a high quality, volunteer, well-trained, well-equipped and early mobilizable Reserve force."*16

These constraints, coupled with the absence of a direct threat, may cause Congress to re-examine the overall size of the Total Force and to add some non-standard and under-resourced missions. The IRR in this case becomes a combat-multiplier for our nation's future military strategy.

In an ideal world, the Services would procure the appropriate force structure derived from the National Military Strategy and the force sizing process to combat the threats to our national security. This force structure would dictate manpower requirements from which to develop personnel inventories and appropriate policies for procuring and sustaining those inventories. What we have been observing at the national level clearly demonstrates that the normal processes have been short-circuited. Our political leaders' desire to reduce forces in light of the perceived lessening threat and the necessity to reduce the federal deficit has caused DOD to reduce manpower before finalizing force structure requirements. Consequently, manpower and personnel policy planners, of necessity, must make their decisions as to numbers, skills, and experience levels required

based on assumptions about what the long term force structure will be."*17

The proper integration of the IRR into this strategy is key to its success. In the Chief, Army Reserve's Long Range Plan (CAR LRP), a drawdown and future scenario for the "Post Cold War" Total Force is as follows:

As the size of the active Army is reduced approximately 25 percent, a review of the Total Army force structure mix may initiate a cross-leveling of combat arms, combat support, and combat service support units. As a result, the active component (AC)/USAR/Army National Guard (ARNG) force structure mix would become more balanced with the ARNG increasing proportionately in combat service support units while the USAR increases its proportion of combat arms units. However, the Reserve Component (RC) force structure and end strength will likely remain relatively constant in size.

The Total Army could receive an increase in non-standard missions to include civil works, disaster relief, counter-narcotics, environmental cleanup, and the USAR may be seen as especially suited for the new missions that involve out of country operations. The use of USAR units with medical, engineer, civil affairs, chemical decontamination, and military police specialties to support these missions while in Overseas Deployment Training (ODT) status would simultaneously provide an increase in unit mobilization and deployment experience, provide extensive "real world" training in wartime skills, and support national security objectives."*18

Total Force Strategy

U.S. Army support of the Total Force policy has been the subject of acrimonious debate since its inception in 1973. This debate has been centered on availability, utility, legality and objectives of U.S. military strategy.

Two tenets have governed the policy: plan for the integrated use of all available forces--active, reserve, civilian, and allied--and the use of reserve forces rather than a draft, as the primary augmentation for the Active forces.*19

Representative Les Aspin's statement supports President Bush's stated defense strategy. In a speech ("In Defense of Defense") to the Aspen (Colorado) Institute (August 2, 1990), the President asserted: "Our task today is to shape our defense capabilities to these strategic circumstances. In a world less driven by an immediate threat to Europe and the danger of global war--in a world where the size of our forces will increasingly be shaped by regional contingencies and peacetime presence--we know our forces can be smaller. . . . our security needs can be met by an active force 25 percent smaller."*20

In the 1990 Joint Military Assessment, Major General John D. Robinson, USA, Director for Force Structure, Resources and Assessment, JCS, points out the particularly difficult task of restructuring the Total Force within fiscal constraints: "In constraints and reduced threats, the United States must move to a smaller military structure. However, our residual force structure must be ready, flexible and well-supported . . . the United States can effectively build and employ this restructured force to accomplish the national military objectives and defend our interest around the globe."*21 The Total Force strategy can only work if we look to the future and work in an environment that focuses on equality, quality and achievement for all, including the IRR.

Mobilization and Call-Up Authority

The activation document for the Reserve Force is Sections 12 and 673b of Title 10, US Code. While there have always been ways

to utilize individual volunteers in support of Active missions, there is no statute that covers this volunteerism. As we enter into a era of downsizing the Active Army and downsizing defense budgets, the Reserves--especially the IRR--will become increasingly valuable and an integral asset to quickly expand our Total Force structure in the future. The Master Mobilization Plan must include provisions for volunteers and involuntary expanded call-up authority (title 10 U.S.C. 673b and DOD Dir. 1235.10) of IRR assets prior to and along with the President's call-up of 200K. As Desert Storm has pointed out, many trained IRR volunteers joined deployed Active component units and stepped forward successfully to take their place on the Total Force team. Representative G. V. "Sonny" Montgomery of Alabama recently stated, "When National emergencies such as Vietnam occur, we cannot afford to debate whether or not to use National Guard or Reserve elements. We [should] call them immediately. The Executive and Legislative Branches must overcome deficiencies to use existing statutory authorities."*22

As the Army re-evaluates global threats and identifies possible operating environments, the planners will consider IRR missions from a global to a regional perspective. From this view the Army will have to identify the Total Force that can best accomplish the mission. The early use of 14,000 IRR Volunteers, as in Desert Shield, provided a new and vital dimension to the United States build up in the Saudi Arabia. "More than 34,000 reservists [IRR] have already been mobilized to perform military support roles. . . . these include doctors, port handlers, water

purification specialists."*23 This offers a perfect example of the IRR filling their present mobilization mission requirements. The future nature and size of the commitment of the IRR to global and regional contingencies will require careful and continuous re-examination.

Challenges, Risks and Opportunities

A major challenge for military strategic planners in the Twenty-first Century will be to "maintain and reinforce the Abrams doctrine calling for the broad representation, commitment and involvement of the American Society in all major military undertakings of the United States."*24 The use of Reserve forces in contingency operations at all levels insures that this relationship with the American public is not lost. It prevents the isolation of the American Army from the American citizens.

Risks

In the next century, aside from decreasing strategic forces and forward deployed AC forces, the nation's military strategists will have to recognize that "it will require a significant Reserve force to provide combat staying power, sustainability and critical skills . . . we will need a contingency force: fast moving--light, highly trained and ready to go on a moment's notice . . . there will be a continued dependence on Reserves for heavy combat units."*25 This statement details our imperative to correct the imbalance in the AC/RC force structure mix--the current imbalance

between combat, combat service and combat service support. The Army must move to a more balanced structure in both the AC and the RC. As we reduce our forward-deployed troop strength and imposed fiscal restraints serve to cut AC strengths, more emphasis will be placed on light rapid deployment and force mix capability in response to regional conflicts. Force-mix decisions, although threat-tailored, "should contain overall the appropriate mix of combat and support elements. A corollary of this approach is that neither force should be unique in the absence of specific military needs that can or must be met."*26 In the future, force-mix decisions will be budget-driven, not strategy-driven. Therefore, it is the Army's responsibility to develop a force mix that is affordable and consistent with AC and RC capabilities. Most important, this force mix should be the most economical set of forces to produce the desired force capability.

Future Requirements

During 21-22 May 1990, the Center for Strategic and International Studies and the National Guard Association of the United States brought together distinguished and knowledgeable leaders from academia, the Congress and the defense sector.*27 The purpose of this meeting of senior leaders was to discuss the issue of the future of the National Guard and the Reserves, major issues "focusing on Total Force Policy manpower, training and readiness." They addressed the future direction for the Total Force, which will provide "the Nation with the economy, strength and flexibility to

face the challenges"*28 of the future. This group formulated several specific recommendations:

--The Total Force Policy must be continued as the basis for providing maximum defense at the lowest cost to our nation.

--All contingency and mobilization plans should include Active, National Guard and Reserve units, and IRR elements on the troop lists, and all three elements should remain part of the programmed projection of power.

--The role of the Guard, Reserve and IRR will change dramatically. Missions performed will expand, and new requirements will be added to meet the challenges posed by the changing world situation. Missions transferred from the Active Component to the Guard, Reserve and IRR must be supported with adequate resources of personnel, equipment and money.

--Active Component and National Guard and Reserve force ratios will likely be reversed in the foreseeable future. There is reason to believe that the majority of the Army heavy forces will move from the Active Component to the Reserve Component. Any such decision must consider the impact on the training, classification, facilities for maintenance and training, operations and maintenance costs, increases in full-time manning and, most importantly, the realistic application of those forces in terms of future mission requirements, including the IRR.

--Active, Guard and Reserve units and IRR personnel should meet the same readiness standards and be evaluated using the same methodologies. Evaluation should be based on multiple indices and performance reports.

--"Cross-fertilization" of Active, Guard, Reserve and IRR leaders at all levels would provide a method for improving knowledge and capability in all components. The Army needs to establish an expanded system of assigning experienced senior level leaders or uniquely trained active component officers as advisors within RC elements.

--The Army training system should be restructured to better support the Guard and Reserve and Individual elements of the Total Force. At the same time, we need to find new and better ways to link military training requirements with civilian experience, training and education. Regional training centers and joint training schools which use both resident and technologically sophisticated non-resident programs should replace existing single branch schools.

--Cadre units lack sufficient personnel and equipment to perform the mission of an organized unit. The Guard and Reserve lack a rational personnel system as is found in the active component. The cadre concept has no application to the National Guard and Reserve unless properly resourced.

This comprehensive set of strategic recommendations clearly and repeatedly cites more critical, expansive, and integrated uses of the IRR in national strategy.

Conclusions

The nation's complex security environment is full of uncertainties. In one respect the Soviet Union is no longer the direct non-nuclear threat it once was. Third world nationalism and new world economic powers have formed to create a multi-power security environment. The uncertainty of this change will place greater demands upon our national military strategy.

This new environment continues to present us with persistently challenging old force structure problems. First, we will have to clearly identify our political, national and international interests. Second, we will have to formulate a strategy that is responsive to both our short-term and long-term military interests. Third, we will have to function within present and future fiscal constraints on the military budget. Finally, we will have to assess our existing military capabilities to meet these challenges in this emerging multipolar environment.

Our strategic military objectives for the pursuit of a non-nuclear war have not changed basically since the mid-1950's. However, this all-too-obvious scenario has been dramatically affected by multi-polar changes. But the main theme of force projection has not changed. "A very likely scenario for the 21st Century may begin with the withdrawal of all U.S. military forces

from Europe and the Pacific theaters, except for token joint forces."*29 This token force would show our commitment to deterrence, provide a forward defense posture and fulfill our obligations under security alliances.

Future conflicts will require our military to quickly field a highly trained, technologically advanced and lethal force. This force will be greatly dependent on a highly trained, technologically proficient and professional reserve force: That includes the IRR.

We must think beyond the present role of the IRR and prepare our national defense strategy for the future, using the IRR to its maximum. The IRR in the future should be a properly trained, properly prepared, and a robust force that can be used in any contingency--any time and any where.

Training strategies must include the IRR. The Reserve Component Training Development Action Plan (RC TDAP) has started to address this issue. However, training strategies are still based on Active Component 240-day training cycles. Thus reserves, to include the IRR, have to accommodate this training where possible. Training of the Reserve Components must address this issue. One solution is to fully fund RC TDAP and decentralize TRADOC approved acquisition, refresher and re-classification schools to regional training sites.

In a period of continuing fiscal constraints, cost factors associated with both the AC and RC will be subject to repeated detailed analyses. The costs and risks weighed in these analyses

will have to be measured in terms of long-term and short-term effects on national military strategy.

The exact size of RC is not an issue. We should emphasize the concept of a highly trained well-motivated soldier who fits into and is made part of the Total Force as a combat multiplier. This would give any would-be future adversary pause for thought--conflict prevention.

Our high dependence on reserve forces has in the past drawn little fanfare or debate, yet the consequences of this reliance are dramatic and far-reaching. At issue is this country's ability to protect its national security interests in the Twenty-first Century.

Without doubt, future strategy will require that we function within imposed future fiscal constraints. However, we should be concerned that presently the reserve forces are trained less, equipped less and in some cases are less ready for deployment than their active-duty counterparts. This fiscal issue demands utmost consideration, for an inadequate reserve force impacts adversely on our strategy and force structure, manning levels, training and equipage.

A cohesive properly trained IRR will be better able to handle contingencies than thrown-together elements, as we witnessed in Desert Storm. Thus IRR troops serve to make AC/RC units deployable. The use of civilian-acquired skills, linked with military requirements, will also aid in supporting a better-trained and effective IRR soldier.

The likely inability of the Army to meet its personnel force requirements for full mobilization will become a progressively worsening problem in the Twenty-first Century. As both the active forces' end strength and reserve units' end strength decline, another manpower pool will grow--the Individual Ready Reserve (IRR).^{*30} The IRR soldier will emerge more and more as a partner in the nation's and military security's interests. The IRR will represent this country's largest pool of deployable pre-trained individual manpower (PIM) available to fill identified shortages in the active Army and Army reserve components (RC) units in the event of any worldwide contingency.^{*31} General Vuono has cogently addressed the issue: "The objective of this force [IRR] will be as always to be an instrument of national security and to protect this country's vital interest at home and in critical regions around the world."^{*32}

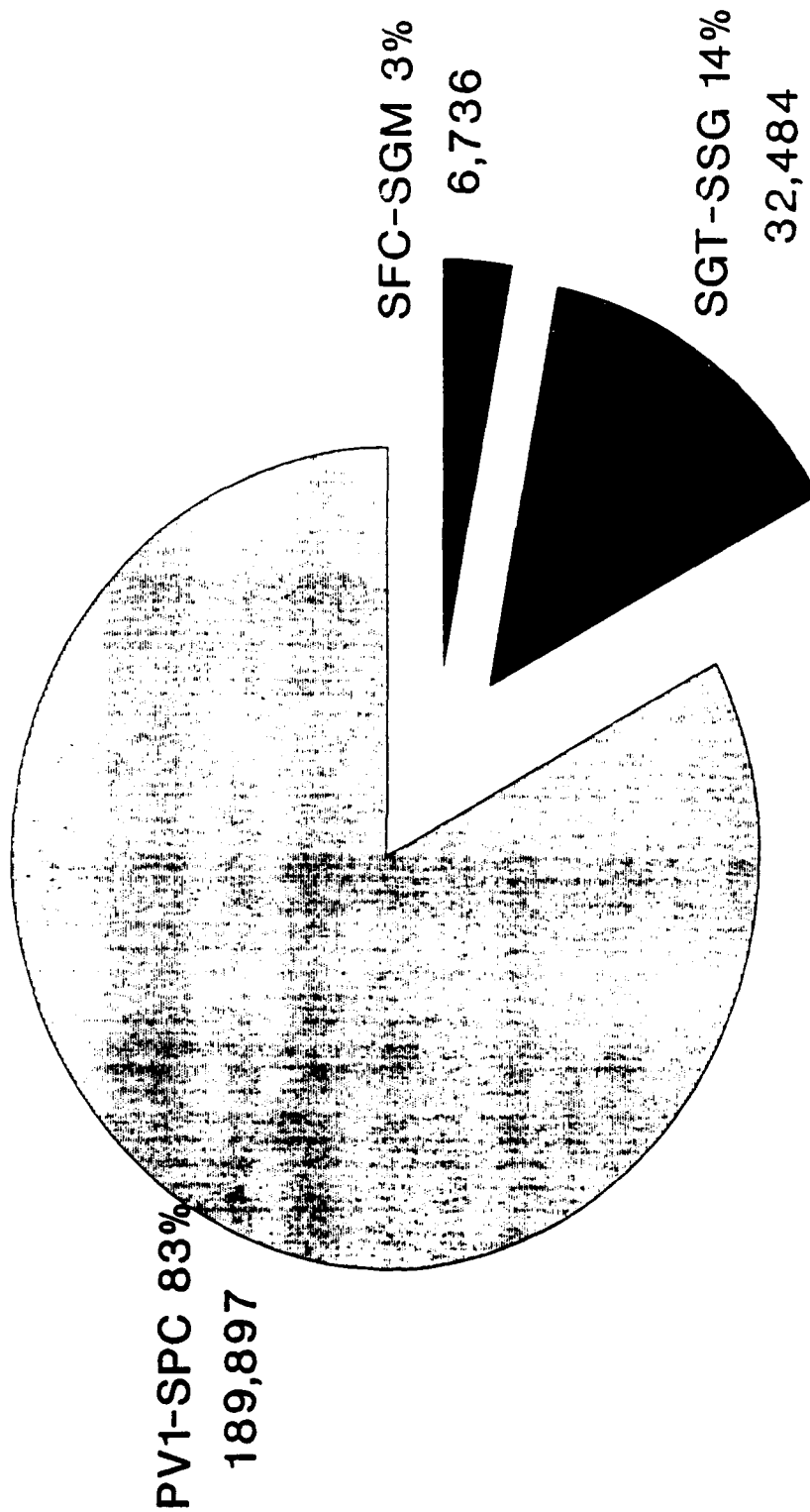
In future strategic planning, strategists in the Twenty-first Century will look to the Vietnam War for two major lessons: First, the Weinberger doctrine that commits the nation before it commits troops; second, the Abrams doctrine that involves the reserves in all major military undertakings. The RC will provide the bridge that prevents isolationism of the Army from the American public. Finally, the use of reserve forces in Desert Storm insured the representation, commitment and involvement of the American public. This lesson cannot be ignored or abandoned in the future.

TABLES

Table

- 1. Enlisted IRR Composition
 - 1.1 Enlisted IRR by Function
 - 1.2 Enlisted IRR by CMF
- 2. Officer IRR Population
 - 2.1 Officer IRR Characteristics
- 3. Officer IRR-Turbulence 1989
- 4. Enlisted IRR Turbulence
- 5. Non-Unit Army Reserve Strength (IRR)
- 5a. Non-Unit Army Reserve Strength Retired Reserve

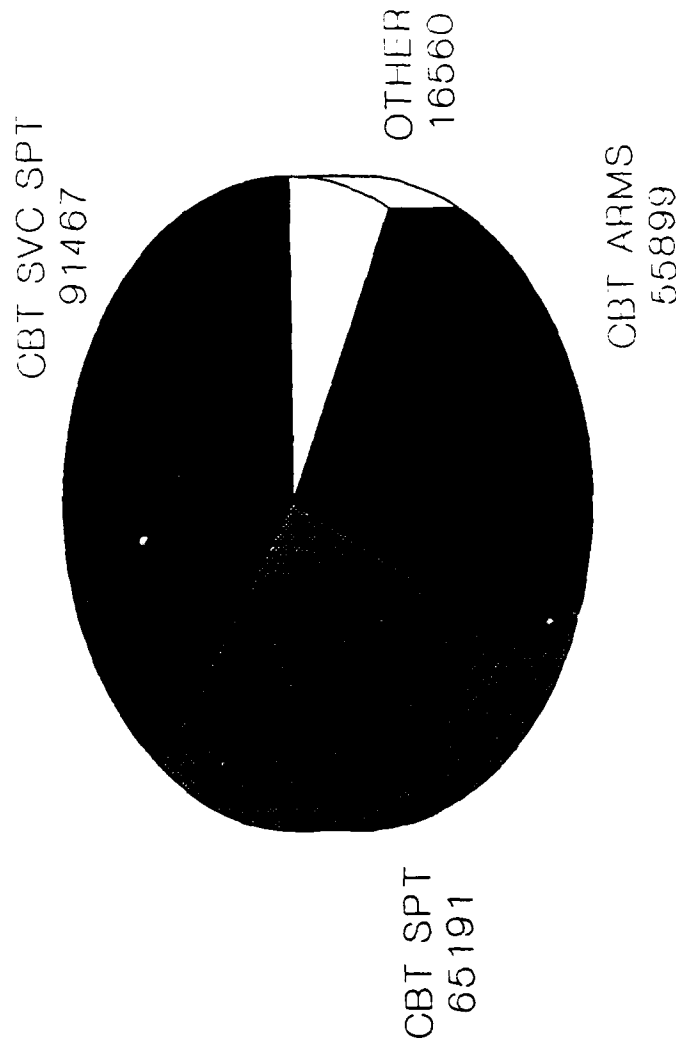
ENLISTED IRR COMPOSITION (BY GRADE)



SOURCE: DCSPER 46

ARPERCEN

ENLISTED IRR COMPOSITION (BY FUNCTION)



ARPERCEN

ENLISTED IRR - DISTRIBUTION BY CMF

11 INFANTRY	28,617	71 ADMIN	14,647
12 CBT ENG	9,457	74 ADP	648
13 FA	13,987	76 SUPP & SERV	16,041
16 AD ARTY	3,746	77 PETROLEUM	2,807
18 SPEC OPNS	207	81 TOP & ENGR	429
19 ARMOR	9,342	84 PA AUDIO/VIS	485
23 AD/MS/MAINT	448	88 TRANS	11,784
27 BAL/LAND/CBT MSL	792	91 MEDICAL	15,194
28 AVN COMM/ELEC MAINT	244	93 AVN OPNS	691
29 COMM-ELEC MAINT	2,620	94 FOOD SERV	7,438
31 COMM-ELEC OPNS	19,061	95 LAW ENF	10,279
33 EW/INT SYS MAINT	269	96 MI	1,291
51 GEN ENG	6,160	97 BAND	441
54 CHEM	1,962	98 EW/CRYPTO	1,755
55 AMMO	1,712		
63 MECH MAINT	23,983	UNTRAINED	15,081
67 AVN MAINT	5,563	TO BE DETERMINED	1,008
70 REC/RET	457	CMD SGTS MAJOR	471

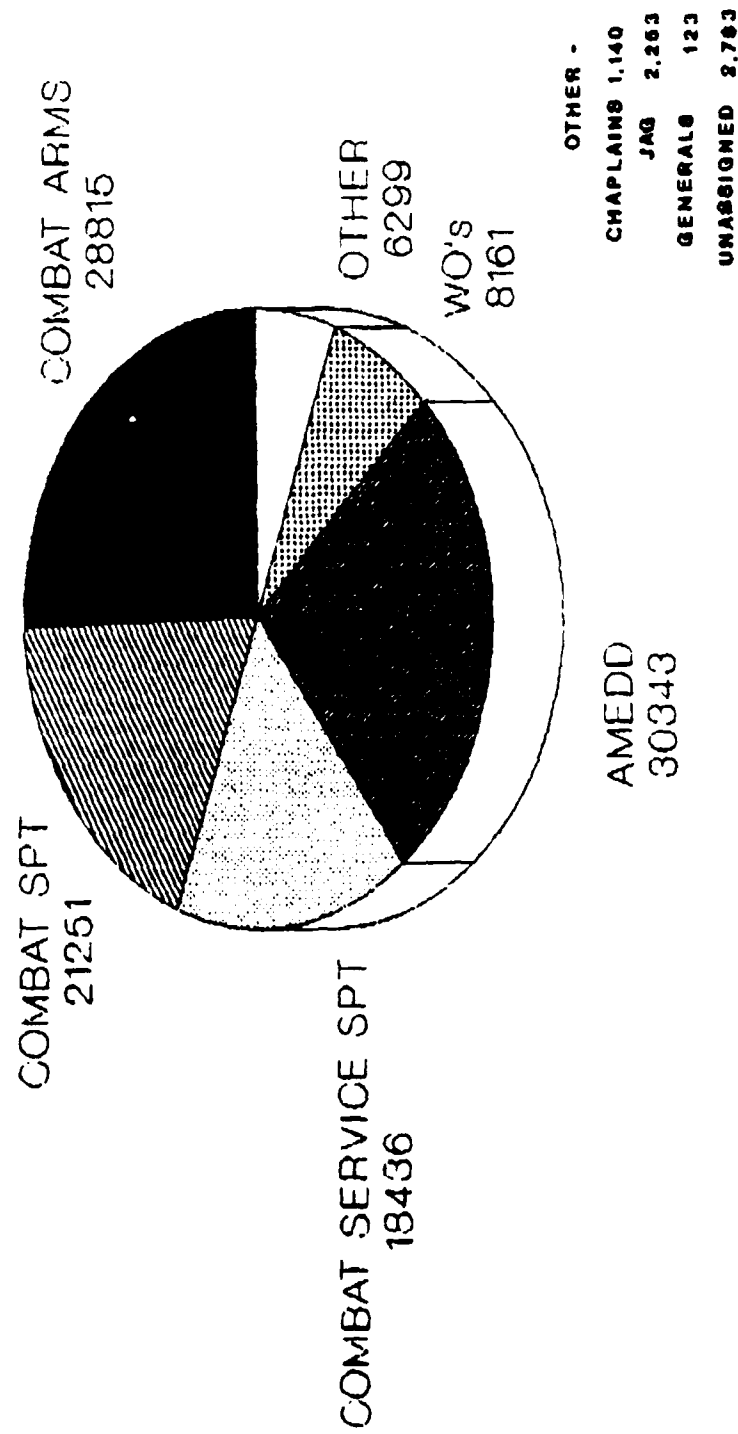
ASSETS

229,117

ARPERCEN

OFFICER POPULATION

TOTAL 113,305



SOURCE: DCSPER 46, AS OF 31 DEC 90

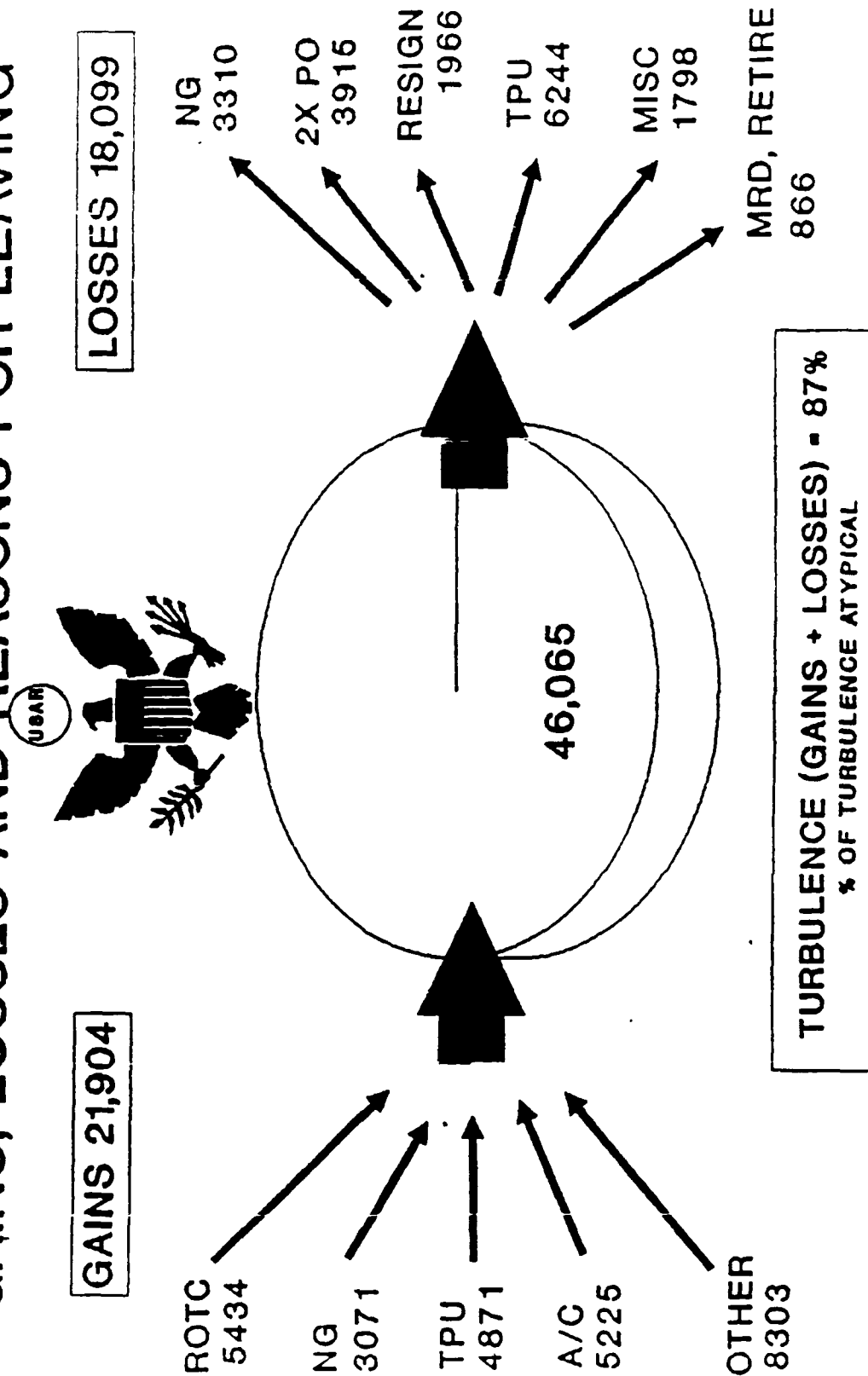
TYPICAL OFFICER CHARACTERISTICS

WO	IRR	TPU
	8%	8%
COMPANY GRADE	58%	49%
FIELD GRADE	35%	42%
AVG MOS AD SVC	49	-
CIV ED (BA OR HIGHER)	81%	80%
COMBAT SVC	13%	-
MSO	13%	-
AVG MOS FED SVC	171	168
SEX (MALE)	84%	83%
▪ data not available		

(EXPANDB16)

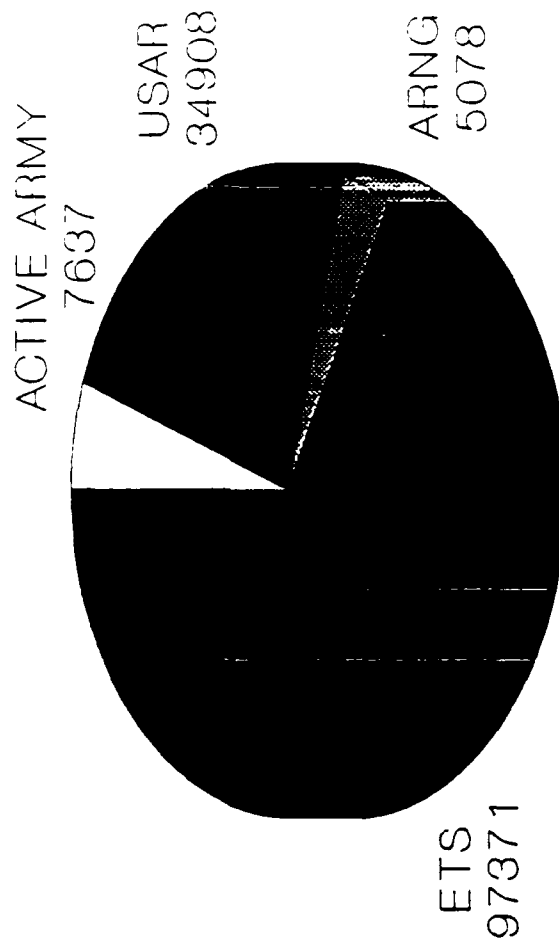
SOURCE: PROFILES REPORT, APRIL 1990

IRR TURBULENCE, FY 89 GAINS, LOSSES AND REASONS FOR LEAVING



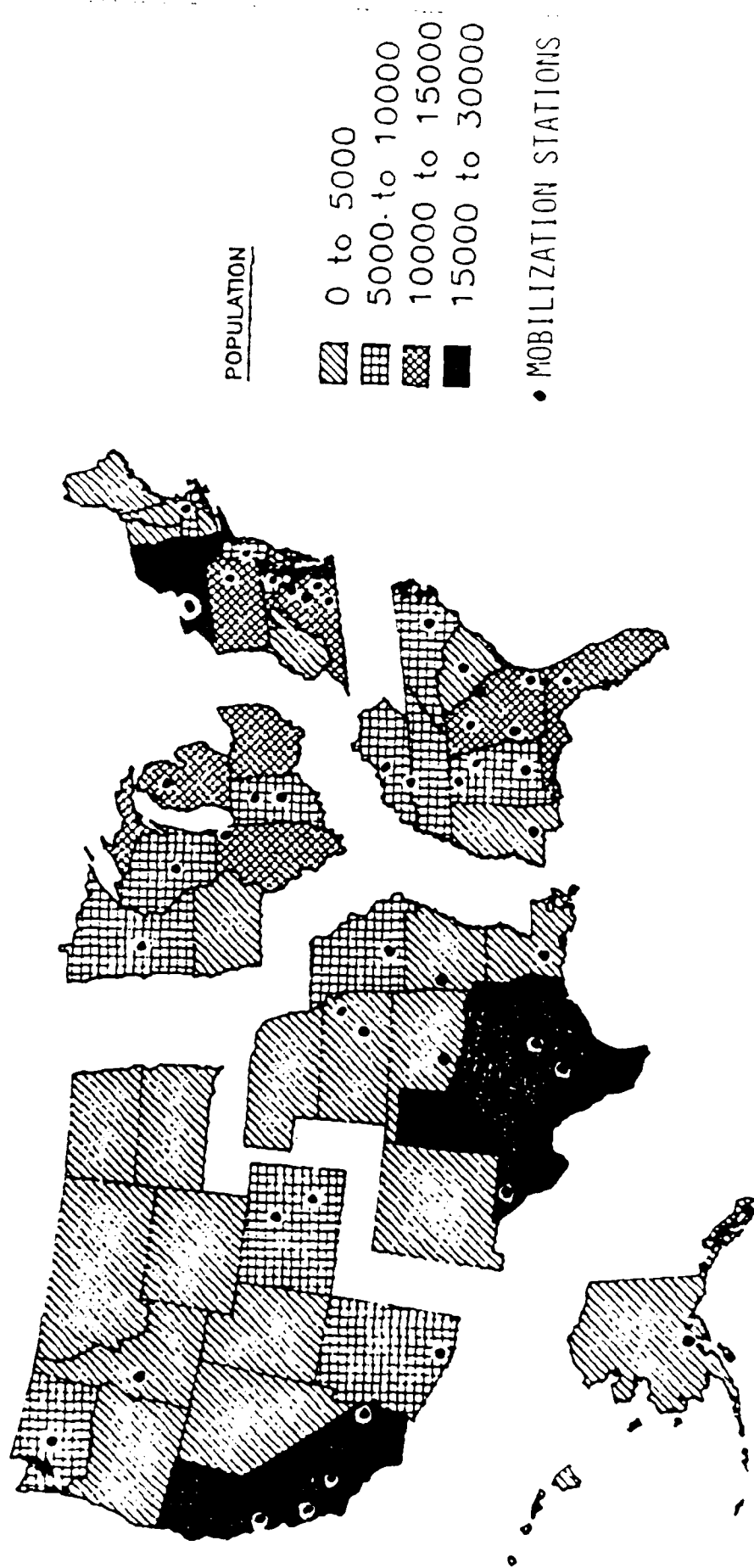
CSRES-110, AS OF 30 SEP 88

ENLISTED TURBULENCE (TRANSFERS OUT)



ARPERCEN

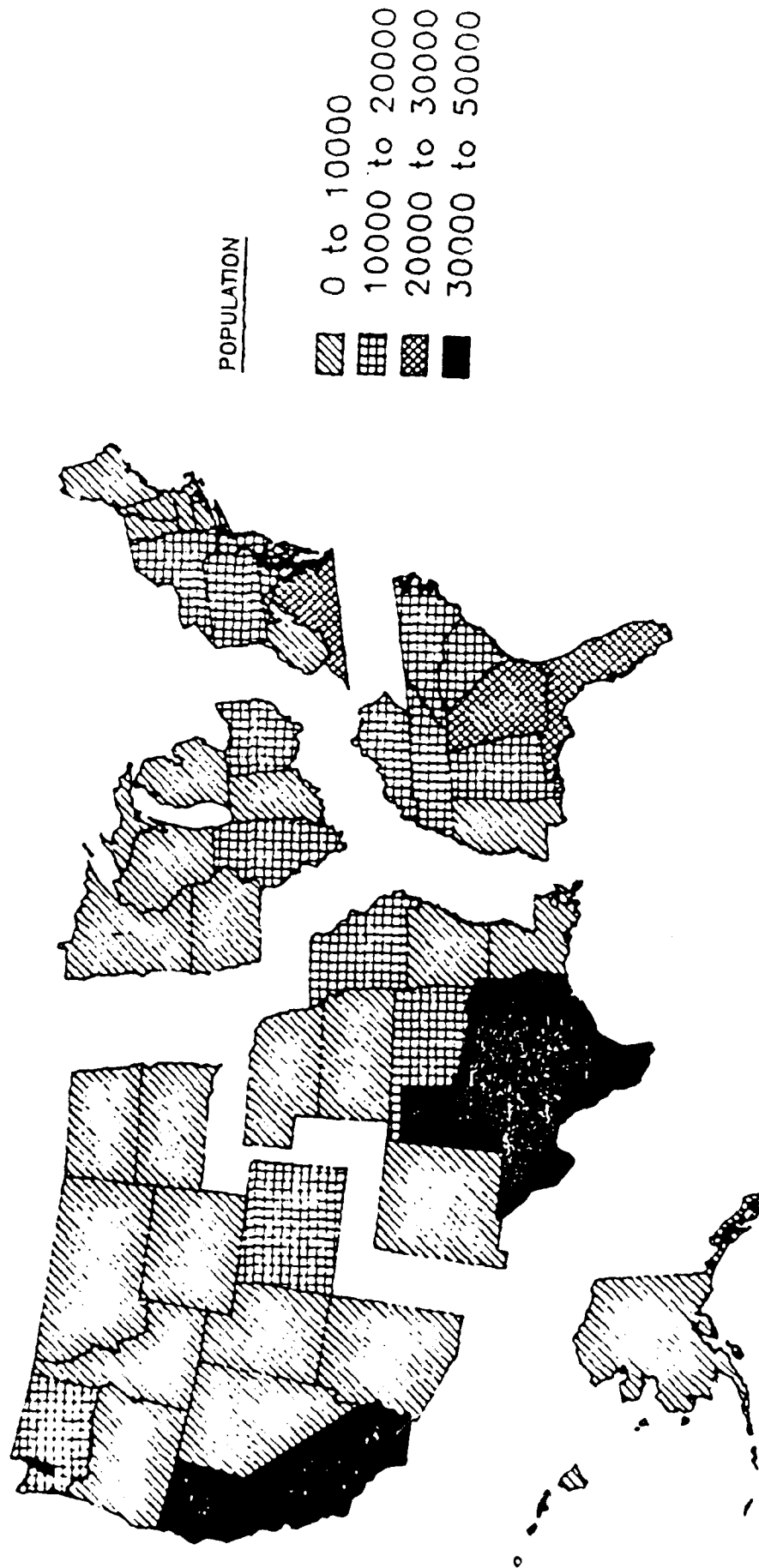
NON-UNIT ARMY RESERVE STRENGTH IRR - READY RESERVE BY STATE AND REGION



Note: Standby Reserve not included

Table 1

NON-UNIT ARMY RESERVE STRENGTH RETIRED RESERVE BY STATE AND REGION



Note: Standby Reserve not included

ENDNOTES

1. Michael Stone and Carl E. Vuono, The Posture of the United States Army Fiscal Year 1991. Washington: 1990. p. I-1.
2. U. S. Department of Defense, Assistant Secretary of Defense, Reserve Components of the Armed Forces. Washington: October 1987. p. 9.
3. U. S. Army Reserve Personnel Center. The Individual Ready Reserve/Individual Mobilization Augmentee Plan. Fiscal Year 1990. St. Louis: 1990. Pp 2-3.
4. U. S. Army Reserve Personnel Center, Strength Summary Report 30 December 1990. St. Louis: 1990. p. 1.
5. U. S. General Accounting Office. IRR: Army Needs to Make More Effective Use of Limited Training Funds. Washington: 12 February 1990. p. 3.
6. Bennie J. Wilson, III, ed. The Guard and Reserve in the Total Force. Washington: National Defense University Press, 1985. p. 126.
7. David S. Ritterpusch, Col. The Army Reserve and U.S. National Defense Strategy. 2nd ed. Study Project. Carlisle Barracks: US Army War College, 2 May 1990. p. 48.
8. Ibid.
9. Ibid.
10. Lt. Gen. William H. Reno, Manpower Reductions, Lecture. Carlisle Barracks: U. S. Army War College, 15 January 1991.
11. U. S. Government Accounting Office, Army Reservist: Peacetime Screening to Identify Key Civilian Employees is Inadequate. Washington: February 1990. p. 2.

12. William F. Ward, Jr., MG. "Performance in Panama Underscores Readiness." 1990-1991 Green Book, Army, Vol. 40, Washington: October 1990. p. 106.
13. William F. Hanna, Col. Chief, Program Analysis & Evaluation Directorate and Richard Underwood, LTC (P) Chief, Mobilization Operations and Plan Division, Mobilization and Training Directorate, U. S. Army Reserve Personnel Center, St. Louis: December 1990.
14. Charles E. Dyer, LTC. Chief, Mobilization Readiness Division, Mobilization and Training Directorate, U. S. Army Reserve Personnel Center. St. Louis: January 1990.
15. GAO, IRR. Pp. 13-14.
16. Stephen M. Duncan. "The Total Force: Palate of U. S. Military Strategy." Defense Issues, April 1990. p. 1.
17. Reno, Lecture. January 1990.
18. U. S. Department of the Army, Chief, Army Reserve. Long Range Plan (CARLAP) 1990-2020. Washington: August 1990. p. 2.21-2.22.
19. U. S. Congress, House. Armed Services Committee, Anti-Reserve Bias Behind Combat Unit Absence. Washington: 15 October 1990. p. 1.
20. George Bush. In Defense of Defense, Defense Issues. Washington: August 1990. p. 1.
21. John D. Robinson, Maj. Gen., 1990 Joint Military Net Assessment, Defense Issues. Washington: March 1990. p. 4.
22. Eric Schmitt. "Pentagon Will Call Up Combat Reserve Units." NY Times, 5 November 1990, p. 4.
23. Center for Strategic Review and International. Future of the National Guard and Reserve. Washington: May 1990. p. 15.

24. CARLAP. p. 312.
25. Colin L. Powell, Gen. All Elements of the Total Force Give Military Prowess, Officer, Washington: February 1991. p. 16.
26. Duncan. p. 8.
27. Future of the National Guard and Reserves. p. 1.
28. Ibid. Pp. 3-5.
29. Colin S. Gray. NATO-Time to Call it a Day. National Interest, Vol. 10, Winter 1987. p. 14.
30. U. S. Army Reserve Personnel Center. The Individual Ready Reserve/Individual Mobilization Augmentee Plan. Fiscal Year 1990. St. Louis: 1990. Pp. 2-3.
31. Ibid.
32. Carl E. Vuono, Gen. Reshaping the Army, Lecture. Carlisle Barracks: U. S. Army War College, October 1990.

BIBLIOGRAPHY

INTERVIEWS

Dyer, Charles E., LTC. Chief, Mobilization Readiness Division.
U.S. Army Reserve Personnel Center. St. Louis: January
1991.

Hanna, William F., Col. Chief, Program Analysis & Evaluation.
U.S. Army Reserve Personnel Center. St. Louis: December
1990.

Underwood, Richard, LTC (P). Chief Mobilization Operations and
Plans Division. U. S. Army Reserve Personnel Center. St.
Louis: January 1991.

STUDENT RESEARCH PAPERS

Brandon, James B., LTC. Reserve Component Mobilization: The Key
to Success? Student Project. Carlisle Barracks: U. S.
Army War College, 2 April 1990.

Meredith, Benjamin E., Col. Present Mobilization System for
Reserve Components RC is Inadequate. Study Project.
Carlisle Barracks: U. S. Army War College, 2 April 1990.
Pp. 1-14.

Ritterpusch, David S., Col. The Army Reserve and U. S. National
Defense Strategy. 2nd ed. Study Project. Carlisle
Barracks: U. S. Army War College, 2 May 1990.

Wintrich, Frederick, LTC. The AC/RC Force Mix--Has the Pendulum
Swung to Far. Study Project. Carlisle Barracks: U. S.
Army War College, 15 May 1990.

BOOKS

Binkin, Martin. U. S. Reserve Forces: The Problem of the
Weekend Warrior. Washington: Brookings Institution, 1974.

Binkin, Martin, and Kaufmann, William W. U. S. Army Guard and Reserve: Rhetoric, Realities, Risks. Washington: Brookings Institution, 1989.

Center for Strategic and International Studies. The Future of the National Guard and Reserve. Washington: May 1990.

Heisbourg, Francois, ed. The Changing Strategic Landscape. Hamden: Archon Books, 1989. "Directions of Change in World Strategic Order," by Karl Kaiser.

Kruzel, Joseph, ed. American Defense Annual, 1989-1990. Lexington: Lexington Books, 1989. Pp. 107-127: "Forces for Projecting U. S. Power," by Paul F. Gorman. Pp. 129-143: "Manpower," by James L. Lacy.

Nixon, Richard M. No More Vietnams. New York: Arbor House, 1985. Pp. 212-231.

Packard, David. A Quest for Excellence. Washington: 1986. entire report.

Stone, Michael P.W., and Vuono, Carl E. The Posture of the United States Army Fiscal Year 1991. Washington: 1990.

Summers, Harry G., Jr. The Astarita Report: A Military Strategy for the Multipolar World. Carlisle Barracks: U. S. Army War College, 30 April 1981.

U. S. Department of Defense. Reserve Forces Policy Board. Reserve Component Programs, Fiscal Year 1989. Washington: 1990.

U. S. Department of the Army. Chief Army Reserve. Army Reserve 90. Washington: May 1990.

Wilson, Bennie J., III, ed. The Guard and Reserve in the Total Force. Washington: National Defense University Press, 1985. Pp. 123-146: "Pretrained Individual Manpower: Albatross or Phoenix?" by Bennie J. Wilson, III and James R. Engelage.

U. S. Army Research Institute for the Behavioral and Social Sciences. 1990 Army Career Satisfaction Survey, by Timothy W. Elig and Kenneth A. Martell. Alexandria: October 1990.

PERIODICALS

"Almanac Issue." Defense. November-December 1990. entire issue.

Aspin, Les. "Does Total Force Remain Vital in the Post-Cold War?" Officer. Vol. 67. February 1991. Pp. 24-27.

Duncan, Stephen M. "Decade of the '90s, Impact on Total Force Policy." Officer. Vol. 66. February 1990. Pp. 18-23.

"1990-1991 Green Book." Army. Vol. 40. October 1990. Pp. 18-28, 46-54, 104-121.

Hyde, Richard J. "A New Force Structure." Military Review. Vol. 70. November 1990. Pp. 11-18.

Jacobs, Jeffery A. "A Mobilization Force." Military Review. Vol. 70. November 1990. Pp. 2-10.

Jacobs, Jeffery A. "Integrating the Total Army: The Road to Reserve Readiness." Parameters. Vol. 20. December 1990. Pp. 73-84.

Marsh, John O., Jr. "Reserve Forces Better Prepared Than Ever Before." Officer. Vol. 66. February 1990. Pp. 24-28.

Nunn, Sam. "More Missions Sustain the Nation's Combat Muscle." Officer. vol. 56. February 1991. Pp. 18-22.

Powell, Colin L. "All Elements of Total Force Give Military Prowess." Officer. Vol. 67. 1991. Pp. 12-16.

Powell, Colin L. "Whom Shall I Send?" Officer, Vol. 66. February 1990. Pp. 12-16.

Oelrich, Frederick C. "The Zook Call-up: Myth or Reality?" ROA National Security Reports. Vol. 8. August 1990. Pp. 11-16.

GOVERNMENT DOCUMENTS

U. S. Army Reserve Personnel Center. First to Fight, First to Train, Mobilization Manpower Requirements (First-Train). St. Louis: 23 February 1990.

U. S. Army Reserve Personnel Center. Individual Ready Reserve and Individual Mobilization Augmentee Management Plan, 1989-1993 and 1990-1994. St. Louis: 29 July 1988.

U. S. Army Reserve Personnel Center. Mobilization Personnel Processing System. (MobPers). St. Louis: August 1989. Pp. 1-51.

U. S. Army Training and Doctrine Command. Training and Organization of the U. S. Army Reserve Components. Fort Monroe: January 1991. Pp. 1-67.

U. S. Army Reserve Personnel Center. Vanguard (ARPERCEN--PERSCOM). St. Louis: 10 November 1990.

U. S. Chief of Staff, Army. The Army Long Range Plan. Washington: 1990. Pp. 12-15, A-1 to A-3.

U. S. Congress. House. Armed Services Committee. Anti-Reserve Bias Behind Combat Unit Absence. Washington: 15 October 1990.

U. S. Congress. House. Committee on Appropriations. Department of Defense Appropriations for 1988. Part 1. Washington: 1987. Pp. 29, 37-96, 393-540.

U. S. Congressional Budget Office. Improving the Readiness of the Army Reserve and National Guard: A Framework for Debate. Washington: May 1978.

- U. S. Congress. House. Armed Services Committee. Iraq, Saudi Arabia and Reserve Components: Missing Lesson for a Future Force Structure. Washington: 15 January 1990.
- U. S. Department of Defense. Reserve Forces Policy Board. Overseas Study of Reserve Issues. Washington: May 1988. Pp. 1-10.
- U. S. Department of Defense. Assistant Secretary of Defense. Manpower Requirements Report 1991. Washington: February 1990.
- U. S. Department of the Army. Chief, Army Reserve. Long-Range Plan 1990-2020. Washington: August 1990.
- U. S. General Accounting Office. Army Reserve Components: Minimum Essential Equipment for Training Has Not Been Effectively Managed. Washington: May 1990. Pp. 1-7.
- U. S. General Accounting Office. Army Reservists: Peacetime Screening to Identify Key Civilian Employees Is Inadequate. Washington: February 1990. Pp. 1-14.
- U. S. Department of Defense. Assistant Secretary of Defense, Reserve Affairs. Reserve Components of the Armed Forces. Washington: 1987. Pp. 1-21.
- U. S. General Accounting Office. Army Training: Management Needed to Enhance Reservist's Training. Washington: June 1989. Pp. 1-44.
- U. S. General Accounting Office. Individual Ready Reserves: Army Needs to Make More Effective Use of Limited Training Funds. Washington: February 1990. Pp. 1-34.
- U. S. General Accounting Office. Reserve Force: DOD Guidance Needed on Assigning Roles to Reserves Under the Total Force Policy. Washington: December 1989. Pp. 11-43.
- U. S. General Accounting Office. Restructuring and Training of U. S. Forces. Washington: April 1990.

Ward, William F. Posture of the U. S. Army Reserve F.Y. 89.
Washington: U. S. Army Reserve, 1988.

NEWSPAPERS

Schmitt, Eric. "Pentagon Will Call Up Combat Reserve Units."
New York Times, 5 November 1990, p. 4.

Tyler, Patrick E. "Pentagon Considering Call Up of Army Combat
Reserves Units." Washington Post, 7 November 1990, p. 7.

Willis, Grant. "New Total Force Unveiled." Army Times, 28
January 1991, p. 6.

LECTURE/BRIEFINGS

Christman, Daniel W., BG. Evolving National Military Strategy.
Lecture. Carlisle Barracks: U. S. Army War College. 1990.

Reno, William H., LTG. Manpower Reductions. Lecture. Carlisle
Barracks: U. S. Army War College. January, 1991.

Thurman, Maxwell R., Gen. Strategic Leadership. Lecture.
Carlisle Barracks: U. S. Army War College. February, 1991.

Vuono, Carl E., Gen. Directions of the Army. Lecture. Carlisle
Barracks: U. S. Army War College. 1990.